

## **II. REMARKS**

### **A. Status of the Claims**

Claims 1-44 were pending in the case at the time of the Office Action. Claims 1, 3, 4, 9, 11, 12, 17, 19, 23, 29, 35, and 39 have been amended in the Amendment set forth herein. Claims 22, 36, 38, 40-41, and 43-44 have been canceled without prejudice or disclaimer. No new claims have been added. Thus, claims 1-21, 23-35, 37, 39, and 42 are currently under consideration.

Support for the amendments of the claims can be found generally throughout the specification, such as in the claims as originally filed. Additional examples of support can be found in the following sections of the specification:

“wherein the ocular tissue comprises retina or RPE/choroidal tissue” – page 4, lines 3-6; page 5, lines 14-16.

“measuring the maximum intensity of a second light beam that is scattered from the ocular tissue” – page 36, line 10 – page 37, line 18.

“measuring a polarization shift of the second light beam” – page 36, line 10 – page 37, line 18.

“aligning an analyzer with the direction of a second light beam that is the most intense light beam scattered from the ocular tissue” - page 36, line 10 – page 37, line 18.

“polarization shift of polarized light scattered off of a neovascularized tissue” – page 36, line 10 – page 37, line 18; page 43, line 9 – page 44, line 10.

Additional detail regarding support for amendments is discussed in the response below.

### **B. The Objection to the Abstract Is Overcome**

The Examiner has objected to the abstract as not including proper language and format for an abstract. The Examiner has not provided detail as to what specific aspect of the abstract is objectionable. Nevertheless, Applicants submit an amendment of the specification to place the

abstract in a more narrative form. If the Examiner continues to find the abstract objectionable, Applicants kindly request explicit detail as to how such an objection may be overcome.

**C. The Rejections Under 35 U.S.C. §103(a) Are Overcome**

**1. Rejections Based on Dreher in View of Hay**

Claims 1-5, 7-13, 15-19, 22-35, 38-40, and 42-43 are rejected under 35 U.S.C. §103(a) as being unpatentable over Dreher *et al.* (U.S. Patent 5,303,709; hereinafter “Dreher”) in view of Hay *et al.* (U.S. Patent 5,632,282; hereinafter “Hay”). The Examiner argues that it would be obvious to one of ordinary skill in the art at the time the invention was made to combine these references to lead to the claimed invention. Applicants respectfully traverse.

**a. No Prima Facie Case of Obviousness as to Method Claims 1 to 34**

In its decision addressing the issue of obviousness, *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 82 U.S.P.Q.2d 1385 (2007), the Supreme Court stated that it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the ways the claimed new invention does ....” *KSR*, 127 S.Ct. at 1741, 82 U.S.P.Q.2d at 1396. For the following reasons, the prior art references cited by the Examiner would not have prompted a person of ordinary skill in the field to combine the elements to lead to the claimed invention.

**i. Neither Dreher Nor Hay Concern Methods for Diagnosing Eye Disease Involving Neovascularization**

Neither Dreher nor Hay concern methods for diagnosing eye disease involving neovascularization. Dreher is directed to methods and apparatus for measuring the topography and thickness of the nerve fiber layer. There is no suggestion in Dreher to modify its teachings to measure neovascularization. Further, the Examiner has not cited any information in Dreher to

suggest that nerve fiber layer thickness in any way correlates with presence of neovascularization in an eye.

Hay does not provide any suggestion to modify the teachings of Dreher to measure neovascularization. Hay concerns methods for diagnosing disorders of optical media of the eyes. No information in Hay has been cited to suggest that its technology can be applied in diagnosing neovascularization, nor has the Examiner cited any information in Hay to suggest that neovascularization is a disorder of the optical media.

*ii. The Methods of Dreher and Hay Are Distinct*

The methods of Hay and Dreher concern distinct technologies. Dreher measures a polarization shift of a reflected probing light (*See, e.g.*, abstract) to determine thickness of the nerve fiber layer, whereas Hay measures a retinal reflect (*See, e.g.*, abstract). The Examiner has not cited any information in Hay to suggest that its technique can involve measurement of a polarization shift, nor has the Examiner cited any information to suggest that the technique of Dreher can be modified to detect disorders of the optical media of the eye.

*iii. Neither Dreher Nor Hay Concern Methods That Involve Measuring the Intensity of a Light Beam Scattered from Ocular Tissue, Wherein the Light Beam is the Most Intense Scattered Light Beam*

Dreher and Hay are distinct from the claimed methods because neither reference concerns methods that involve measuring the intensity of the most intense beam that is scattered from the ocular tissue. Dreher does not appear to address a method that involves measuring the maximum intensity of a scattered light beam. Dreher suggests that stray light is blocked by a “pinhole” and “cannot reach the photodetector.” Col. 5, lines 40-43. This would suggest that Dreher seeks to minimize an effect of scattered light. Further, Dreher does not suggest that any “return beam” that it purportedly analyzes is the most intense scattered beam, as it is possible that the most

intense scattered beam was blocked by the pinhole. *See* col. 6, lines 10-19. Nor does Hay appear to be directed to measuring the intensity of scattered light, as it is directed to measuring light reflected from the retina. Abstract.

In view of the foregoing, the method claims cited in this rejection are not obvious under 35 U.S.C. §103(a) based on Dreher in view of Hay. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

*b. The Rejections of the Apparatus Claims are Moot*

The rejected apparatus claims include claims 35, 38-40, and 42-43. Independent apparatus claim 35 has been amended to recite the limitations of claim 36, a claim not included in this rejection and thus considered nonobvious by the Examiner. Therefore, the rejection of claim 35 is moot. Further, the rejection of claim 37 is moot because this claim depends from claim 35. *See In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“[D]ependent claims are nonobvious if the independent claims from which they depend are nonobvious.”). The rejection of dependent claim 38 is moot since this claim has been canceled without prejudice or disclaimer as discussed in greater detail below.

The rejection of independent claim 39 is moot because it has been amended to recite the limitations of claim 41, a claim not included in this rejection and thus considered nonobvious by the Examiner. The rejection of claim 40 is moot since this claim has been canceled without prejudice or disclaimer as discussed in greater detail below.

The rejection of claim 42 is moot because this claim has been amended to recite the limitations of claim 44, a claim not included in this rejection and thus considered nonobvious by the Examiner. The rejection of claim 43 is moot since this claim has been canceled without prejudice or disclaimer.

In view of the foregoing, the rejection of each of the apparatus claims is moot.

**2. Rejections Based on Dreher in View of Hay and Further in View of Trachtman**

Claims 20-21, 36-37, 41, and 44 are rejected under 35 U.S.C. §103(a) as being unpatentable over Dreher in view of Hay as applied above, and further in view of Trachtman (U.S. Patent 5,002,384). Applicants respectfully traverse.

Independent claim 19 has been amended to recite the limitations of claim 22, a claim not included in this rejection and thus considered nonobvious by the inventor in view of the cited combination of references. Claims 20 and 21 depend from claim 19, and are therefore nonobvious as well. *See In re Fritch*, 972 F.2d at 1266.

Claim 36 has been canceled without prejudice or disclaimer. Claim 37 depends from claim 35, and claim 35 in turn has been amended to recite the limitations of claim 38, a claim not included in this rejection. Therefore, the rejection of claim 37 is moot.

The rejection of claims 41 and 44 is moot since these claims have been canceled without prejudice or disclaimer.

Further, it is noted that Trachman is unrelated to a method and apparatus for diagnosing neovascularized tissue.

**3. Rejections Based on Dreher in View of Hay and Further in View of Lerrick or Glaser**

Claims 6 and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Dreher in view of Hay as applied above, and further in view of Lerrick *et al.* (U.S. Patent 5,670,151; hereinafter “Lerrick”) or Glaser *et al.* (U.S. Patent 5,767,079; hereinafter “Glaser”). Applicants respectfully traverse.

Lerrick is cited as teaching a form of eye disorder that is diabetic retinopathy, and Glaser is cited as teaching methods for treating ophthalmic disorders including retinal disorders, neovascularization, and diabetic retinopathy.

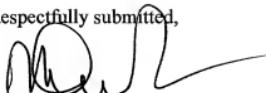
For the reasons set forth above, the combination of Dreher in view of Hay fails to render the claimed invention obvious. Further, the addition of Lerrick and Glaser fails to remedy the deficiencies of Dreher and Hay. While Lerrick and Glaser address *treatment* of certain eye diseases, they do not appear to applicants to be directed to methods of *diagnosing* ocular neovascularization. The Examiner is invited to identify any such teaching or suggestion in Lerrick or Glaser. Further, these references do not involve measuring the intensity of a light beam that is scattered from ocular tissue, wherein the light beam is the most intense scattered light beam. Rather, they appear to concern administration of therapeutic agents.

Therefore, given that Lerrick and Glaser fail to provide any missing suggestion or motivation to lead to the claimed methods or any reasonable expectation of success to practice the claimed methods of diagnosing an ocular disease involving neovascularization, there can be no finding of obviousness.

#### **D. Conclusion**

In view of the foregoing, it is respectfully submitted that each of the pending claims is in condition for allowance, and a Notice of Allowance is earnestly solicited. The Examiner is invited to contact the undersigned attorney at (512) 536-5639 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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Date: April 24, 2009